REMARKS/ARGUMENTS

Reconsideration of this application and entry of this Amendment are solicited. Claims 5-8 are pending in the application.

A Notice of Appeal is filed concurrently with this response thereby extending the time for an additional two months.

As a preliminary matter, this application is a divisional application of Serial No. 10/093,508 filed March 11, 2002 and now abandoned. A certified copy of the priority document was submitted in the file of the parent application on May 20, 2002. This information is also included in the original transmittal sheet for the present application. The Office Action Summary sheet does not make any comment with respect to claim for benefit of priority or acknowledge receipt of certified copies in the parent application, notably by checking boxes 12 a) 2. In the next communication please acknowledge receipt of the priority document in the parent application.

In the current Action, claims 5-8 are rejected as failing to comply with a written description requirement the examiner saying no support can be found for the term "successive steps". Support for this term is implicit in the application as filed. In the Examples in the specification, analyses were carried out with no steps between eluting, detecting cations and preparing a chromatogram. Therefore, expression "successive steps" is both apt and supported by the Examples.

However, in order to advance examination and to respond to the examiner's comment of the term "comprising" (*see* page 3, second paragraph, second sentence) the claims have been amended to refer to "consisting of" the recited steps. This amendment serves to reduce issues and for this reason alone this Amendment should be entered.

Claims 5 and 6 stand rejected allegedly being anticipated by or obvious over the Hajos Journal of Chromatography article. Claims 5-8 are rejected on the basis of this same article in combination with two Japanese patent documents. Applicants traverse both rejections.

Contrary to the argument claims 5 and 6 are anticipated by Hajos, Hajos merely discloses analysis of cations by suppressed cation chromatography using "CMMS-1" micromembrane eluent suppressor (as described in "2. Theory" on page 142 and "3.2. nstrumentation" on page

143), but not by non-suppressed cation chromatography as in the method of the present invention. Further, the examiner has also stated that "if a difference exists between the claims and Hajos, it would reside in optimizing the steps of Hajos". This is not correct. However, in Hajos, the suppressor is used to convert eluent components such as the hydrogen ion to their dipolar forms (such as water in the case of the hydrogen ion eluent) (*see* "1. Introduction" on page 141 and "5. Conclusion" on pages 145-147), thereby enabling analysis of trace amounts of cations. This removing the suppression step from the method disclosed in Hajos does not necessarily lead to a successful nonsuppressed ion chromatography system. In nonsuppressed ion chromatography, it is necessary to select an eluent which does not interfere with conductivity detection as it is, because there is no suppression step to convert, for example, the hydrogen ion eluent to water. Hajos itself implies that eluents to be used in nonsuppressed ion chromatography are different from those used in suppressed ion chromatography (like the hydrogen ion derived from HCl), by stating that "The most commonly used eluents in cation chromatography are the mineral acids" in "1. Introduction".

The examiner has then argued that "it would have been obvious to use either nitric or phosphoric acid as the particular acid in Hajos either Japan 06-018505 ... discloses that phosphoric acid is a desirable acid eluent for cation analysis or because Japan 08-257419 ... discloses nitric acid is a desirable acid eluent for cation analysis". The examiner's position is based on a false premise for it has not been established there is any motivation to combine either of the JP citations with Hajos or vice versa.

It is well-established that before a conclusion of obviousness may be made based on a combination of references, there must have been a reason, suggestion, or motivation to lead one of ordinary skill in the art to combine those references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617-18 (Fed. Cir. 1999)("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.")

Merely asserting that it would have been within the skill of the art to substitute one type of gas for another in the contrast agent of the primary reference is not enough. *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); *see* also MPEP § 2143.01.

There is nothing in any of the cited references to suggest the desirability of the combination or modification in the manner indicated by the Examiner. Specifically, there is no motivation or suggestion to combine Hajos with either of the JP citations.

There is no disclosure in any of the cited references that suggests combining Hajos with Japan 06-018505 or Japan 08-257419. As explained above, in suppressed ion chromatography, the eluent is converted to its dipolar form, while in nonsuppressed ion chromatography, it is necessary to use eluents which do not interfere with conductivity detection. Therefore, it is possible that some eluents which are effective in suppressed ion chromatography cannot be used in nonsuppressed ion chromatography because they completely interfere with conductivity detection.

For example, though HCl falls within the mineral acids which Hajos discloses as the most commonly used eluents and generates the hydrogen ion which Hajos discloses as an excellent choice for use as eluent in suppressed ion chromatography, neither of the cited Japanese references which employ nonsuppressed ion chromatography use HCl. Further, though Hajos discloses that the protonated cations of aromatic and heterocyclic amines were commonly used eluents in nonsuppressed ion chromatography, Hajos itself uses histidine, not an amine.

From the statement in "5. Conclusion" in Hajos that "the suppressor converts them to their dipolar forms", it is clear that Hajos uses histidine on the premise that histidine is converted to its dipolar form by the suppressor. The skilled person would have thought that in nonsuppressed ion chromatography, histidine might produce a negative peak which interferes with detection of cations.

The fact that eluents suitable for suppressed ion chromatography are not used in nonsuppressed ion chromatography, combined with the fact that amine eluents which are disclosed in Hajos as suitable for nonsuppressed ion chromatography are not used in the suppressed ion chromatography of Hajos, clearly indicates that the eluents to be used in nonsuppressed ion chromatography differ from those to be used in suppressed ion chromatography, and that it is not obvious to use the histidine eluent used in Hajos, in nonsuppressed ion chromatography.

For the above reasons it is respectfully submitted the claims are both novel and inventive. Reconsideration, entry of this Amendment and allowance are solicited. Should the examiner require further information, please contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____

Arthur R. Crawford
Reg. No. 25,327

ARC:eaw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100